

ABSTRACT

A method for assembling semiconductor devices includes providing a first semiconductor device, securing spacers to noncircuit bond pads of the first semiconductor device, and positioning a second semiconductor device on the spacers. Adhesive material may be applied to a surface of one or both of the first and second semiconductor devices prior to positioning of the second semiconductor device, or introduced between first and second semiconductor devices. The noncircuit bond pads may be electrically isolated from other structures of the first semiconductor device or communicate with a ground or reference voltage plane, in which case the back side of the second semiconductor device may communicate with the ground or reference voltage plane upon being positioned against the spacers. Additional semiconductor devices may be added to the assembly. The first semiconductor device may be associated with a substrate. Assemblies and packages at least partially fabricated by the method are also disclosed.